ERIOPHYID STUDIES XXIV

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Eriophyid Studies XXIV

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Abstract: This installment contains the descriptions of four new species and one new subfamily. *Eriophyes prunidemissae* n. sp. from buds of *Prunus demissa* (Nutt.), occurring in California and Oregon; *Oxypleurites ferruginator* n. sp. rusting leaves of buckeye in the vicinity of New York City; *Heterotergum wilsoni* n. sp. on leaves of *Simmondsia* in Southern California; *Floracarus deleoni* n. sp. a rust mite on leaves of *Pithecolobium* in Florida; Nothopodinae, new subfamily, established for the reception of the Eriophyid genera *Nothopoda* and *Floracarus*.

Eriophyes prunidemissae Keifer, new species

Plate 245

Female 185-200μ long, 40-45μ thick, wormlike, color dull yellowish-white. Rostrum 30μ long, curved down. Shield 27μ long, 38μ wide; central design variable, often obscure: median line ending in a dart-shaped mark; admedians stronger to rear and usually joining with declivitous first ring; submedians faint, usually a slight outwardly oblique mark in front of dorsal tubercles; one or two curved marks below and ahead of dorsal tubercles; sides of shield granular, upper line of granules framing central area. Dorsal tubercles 17μ apart, a little ahead of rear margin; dorsal setae 30μ long, projecting up and forward. Forelegs 24μ long, tibia 3μ long, with short seta; tarsus 4.5μ long, claw 7μ long, tapering; featherclaw 4-rayed. Hindlegs 22μ long, tibia 3μ long, tarsus 4.5μ long, claw 8.5μ long. Coxae with some granules, anterior coxae contiguous. Abdomen with about 60 rings; microtubercles on all body rings; microtubercles somewhat elongate and rounded, 5-6 microtubercles in a 10μ distance measured transversely or vertically. Lateral abdominal seta 21μ long, on about ring 7; first ventral 21μ long, on about ring 19; second ventral 4μ long, on about ring 34; third ventral seta 21μ long, on ring 6 from rear. Accessory seta of moderate size. Female genitalia 20μ wide, 12μ long, coverflap with about 10 longitudinal furrows; seta 4μ long.

Male 185μ long, 45μ thick.

Type locality: Forest Home district, San Bernardino County, Cal. **Collected:** Sept. 15, 1955 by the writer. **Host:** *Prunus demissa* (Nutt.) (Rosaceae), Western choke-cherry. **Relation to host:** The mites live in the terminal buds but apparently have no relation to leaf galls as they have been found more numerous on choke-cherry shrubs which have no such galls on the leaves. **Type material:** A type slide and four paratype slides bear the above data. Two paratype slides come from this same host five miles east of McCloud, Shasta County, Cal., collected Aug. 31, 1953 by the writer. Two paratype slides from this same host were collected Aug. 24, 1955 at The Dalles, Oregon, by Dr. K. G. Swenson.

Eriophyes prunidemissae is a nondescript mite with numerous slight variations, especially as to clarity of shield design, that is allied to *prunandersoni* by the possession of the diagonal mark in front of the dorsal tubercles. Both species have a 4-rayed featherclaw. The new species differs from *prunandersoni* by having a larger beak, larger microtubercles, and the more obscure shield design. This mite is described at this time because of increased interest in budmites on *Prunus* spp.

Oxypleurites ferruginator Keifer, new species

Plate 246

Female (protogyne) 180-200μ long, 40-45μ wide, 35-40μ thick; flattened fusiform; color dull yellowish. Rostrum 21μ long, projecting down. Shield 43μ long, 42μ wide, subtriangular: Design obscure, admedians faintly present, a submedian distinct ahead of dorsal tubercles and another distinct further to side; anterior lobe somewhat acute, rounded apically, transversely truncate in side view with a slight ventral projection. Dorsal tubercles 22μ apart, on rear margin; dorsal setae 13μ long projecting back and a little centrad. Forelegs 28μ long, tibia 5.5μ long, with seta; tarsus 6μ long, claw 7μ long, apically knobbed; featherclaw 4-rayed. Hindlegs 26μ long, tibia 5μ long, tarsus 6μ long, claw 7.5μ long. Coxae set with curved lines, anterior coxae contiguous. Dorsum of abdomen with about 25 tergites which are broad and lack microtubercles; tergites forming a central longitudinal ridge; laterally the tergites project into short lobes. Abdominal sternites 65-70 in number, completely set with small microtubercles. Lateral seta 22μ long, on about sternite 11; first ventral seta 35μ long, on about sternite 25; second ventral

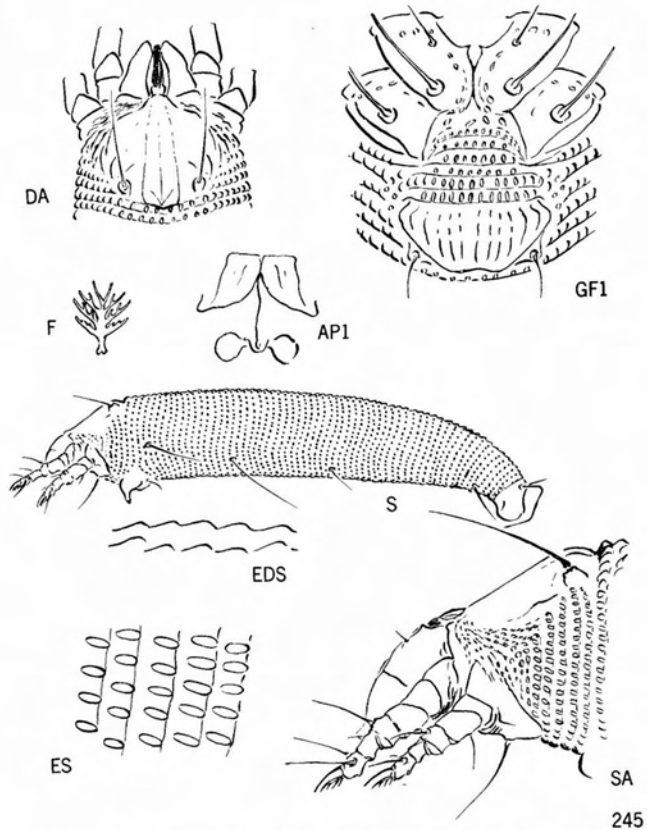

PLATE 245—ERIOPHYES PRUNIDEMISSAE N. SP.

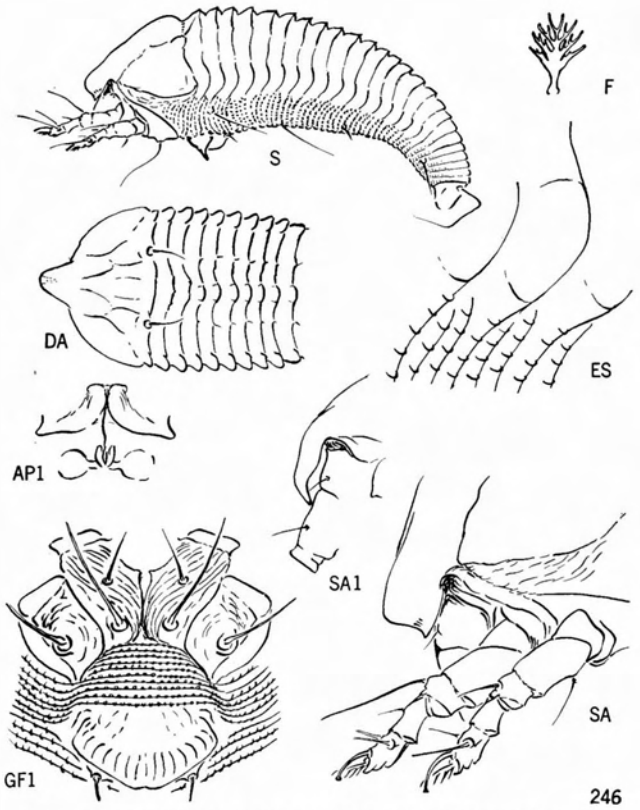

PLATE 246—OXYPLEURITES FERRUGINATOR N. SP.

12μ long, on sternite 42; third ventral 22μ long, on sternite 5 from rear. Accessory seta absent. Female genitalia 20μ wide, 16μ long, coverflap with 14-16 longitudinal furrows; seta 14μ long.

Deutogyne about same dimensions as protogyne; tergites narrower than protogyne and lacking middorsal ridge and side lobes; anterior shield lobe curving half-way down rostrum and ending in a recurved point.

Male similar to protogyne; 160μ long.

Type locality: Bay Ridge, Brooklyn, N. Y. **Collected:** Aug. 10, 1955 by Lt. M. E. Tinker. **Host:** *Aesculus* sp. possibly *glabra* Willd. (Hippocastanaceae), buckeye or horse chestnut. **Relation to host:** the mites feed on the underside of the leaves causing rusting. **Type material:** A type slide and five paratype slides bear the above data. In addition there is the dry material from which the slides were made. This is the first *Oxypleurites* described from *Aesculus* on the east coast of North America. The species called attention to itself by severely rusting buckeyes in the vicinity of New York City, particularly around Army installations. The new species differs from *Oxypleurites aesculifoliae* (K.), the rust mite on California buckeye, mainly by the shape of the anterior shield lobe on the protogyne. In lateral view this lobe on *aesculifoliae* is somewhat turned up and subacuminate. On *ferruginator* the lobe turns down and is transversely truncate.

Heterotergum wilsoni Keifer, new species

Plate 247

Female 110-125μ long, 45μ wide, 35-40μ thick, fusiform, orange in color. Rostrum large and downcurved, 40μ long. Shield 40μ long, 35μ wide, anterior lobe broad and blunt; design absent except for a short inwardly curved line on inner side of dorsal tubercles. Dorsal tubercles 27μ apart, on rear margin; dorsal setae 7μ long, projecting backwards. Forelegs 30μ long, tibia 5μ long, with seta; tarsus 5μ long, claw 8μ long, tapering; featherclaw 6-rayed. Hindlegs 26μ long, tibia 4.5μ long, tarsus 5μ long, claw 8μ long. Coxae with a few lines, the anterior coxae contiguous. Abdomen immediately behind shield with a dorsal continuation of two to four of the sternites; broad tergites about 8 in number, the total tergites numbering about 16; sternites approximately 40 in number, microtuberculate. Lateral seta 16μ long, on sternite 3 behind shield; first ventral 22μ long, on sternite 12; second ventral 7.5μ long, on sternite 22; third ventral 12μ long, on sternite 4 from rear. Accessory seta minute. Female genitalia 20μ wide, 12μ long, coverflap with 12-14 longitudinal furrows, seta 23μ long.

Male 110μ long.

Type locality: Aguanga district, Riverside-San Diego County line. **Collected:** Sept. 14, 1955 by the writer. **Host:** *Simmondsia californica* Nutt. (Buxaceae), Jajoba. **Relation to host:** the mites live among the hairs on the leaf surfaces, causing no apparent damage. **Type material:** A type slide and five paratype slides bear the above data. In addition there is the dry material from which the slides were made. I am pleased to name this very tiny mite for Norton S. Wilson who originally discovered it and called my attention to it. The genus to which this mite belongs is characterized by the dorsal extension of the anterior sternites. The genotype of *Heterotergum* is *gossypii* K., a mite damaging cotton in Brazil. From the genotype the new species differs in having relatively larger tergites and in the larger size of the shield lobe as compared to the shield size. The host, *Simmondsia*, is the only native representative of the Buxaceae in California.

Floracarus deleoni Keifer, new species

Plate 248

Female 125-140μ long, 40-50μ thick, fusiform, color in life probably light yellowish-white. Rostrum 17.5μ long, projecting down. Shield 38μ long, 45-50μ wide; median line complete; admedians complete, connected to median by cross lines at rear ¼; a partial submedian inside dorsal tubercles; an outwardly diagonal line from dorsal tubercles extending through one or two body rings; anterior shield lobe broad and blunt, composed of an upper and lower ridge which ridges extend caudally to lateral shield lobes. Dorsal tubercles somewhat ahead of shield margin, 26μ apart; dorsal setae 5μ long, projecting back and diagonally centrad. Forelegs 20μ long, tibio-tarsus 7μ long, with a pair of large setae; claw 4.5μ long, on innerside of tibio-tarsus, knobbed; featherclaw apparently 5-rayed. Hindlegs 17.5μ long, tibio-tarsus 5.5μ long, claw 4.5μ long, arising from usual dorsal position. Anterior coxae fused into one structure with suboral plate, spinulate across anterior ⅔; setae 1 missing. Abdomen with plus or minus 45 rings; microtubercles obscure dorsally anteriorly, becoming more prominent ventrally and caudally; microtubercles principally elongate streaks ending in a dot. Lateral seta 14μ long, on ring 2 behind shield; first ventral 14μ long, on about ring 14; second ventral 5μ long, on ring 25; third ventral 15μ long, on ring 5 from rear. No accessory seta. Female genitalia 19μ wide, 15μ long, basal area of coverflap with granular surface; seta 5μ long.

Male 125-140μ long.

Type locality: Coral Gables, Fla. **Collected:** July 19, 1955 by Donald De Leon. **Host:** *Pithecolobium guadaloupense* Chapm. (Leguminosae). **Relation to host:** The mites

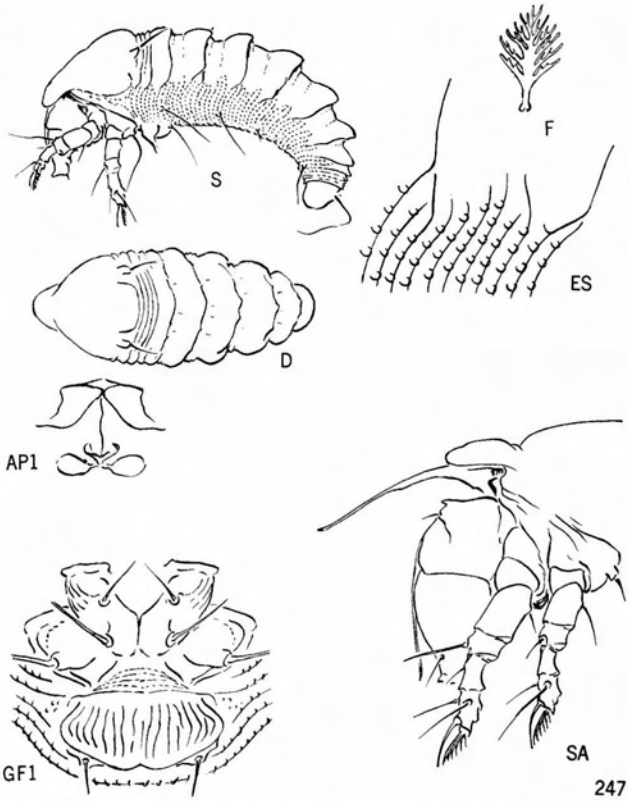

PLATE 247—HETEROTERGUM WILSONI N. SP.

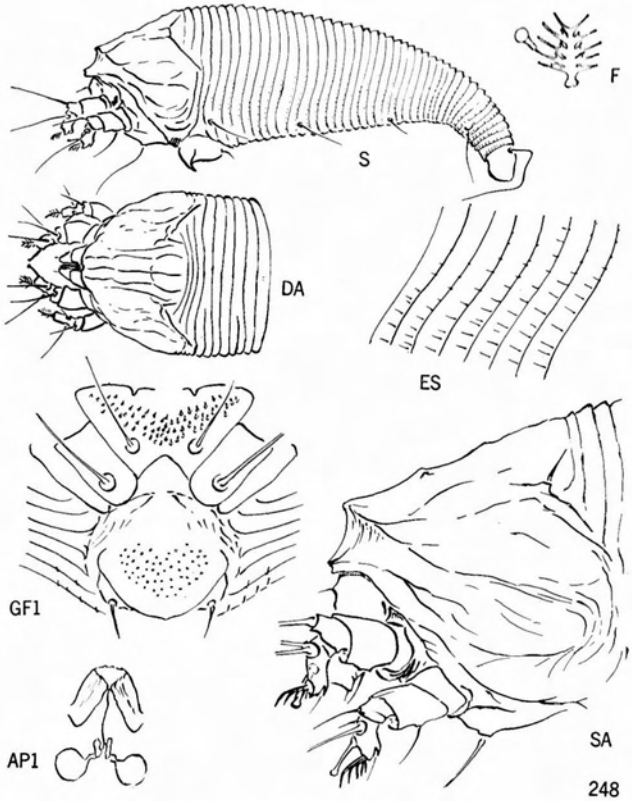

PLATE 248—FLORACARUS DELEONI N. SP.

DESIGNATIONS ON PLATES

AP1—Internal female genitalia
D—Dorsal view of mite
DA—Dorsal view of anterior section of mite
EDS—Side view of dorsal microtubercles
ES—Lateral rings and microtubercles
F—Featherclaw from below
GF1—Ventral view of coxae and female genitalia
S—Side view of mite
SA—Side view of anterior section of mite
SA1—Lateral view of anterior shield lobe of deutogyne

Editor's Note:

Eriophyid Studies XXIII appeared in this Bulletin Vol. XLIV (3), p. 126-30, Oct. 17, 1955. In XXIII plates 243 and 244 are unfortunately interchanged. To read these illustrations correctly transfer the right hand illustration to the left, and the left one to the right. This error is being corrected in the reprints.

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